

CHAPTER 25. MONITOR AN AIR SHOW/AIR RACE

SECTION 1. BACKGROUND

1. PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) ACTIVITY CODES.

A. Maintenance: 3684 Air Show/3685 Air Race

B. Avionics: 5684 Air Show/5685 Air Race

3. OBJECTIVE. This chapter provides guidance for ensuring that those aircraft, authorized to participate in an air show or air race, comply with regulatory requirements and maintain the highest possible standards of safety.

5. GENERAL. The surveillance of air shows and/or air races is mainly an operations function. Aviation safety inspectors (ASI) (airworthiness) will work closely with ASI's (operations) in the surveillance of these aviation events.

A. ASI Duties. The airworthiness ASI's primary functions are to ensure the continued airworthiness of participating aircraft, monitor the safety practices of participating individuals, and ensure compliance with waivers and authorizations. The assigned ASI's duties include:

- Preseason evaluation meeting
- Evaluation of waivers and authorizations
- Recommendation of issuance or denial
- Air show/race surveillance
- Review of airman and aircraft certification

(1) Review of Certification. The review of airman and aircraft certification involves three main responsibilities:

(a) Review of the aircraft records to ensure that the state of inspection is current, if previous arrangements were made with the operator prior to the arrival of the aircraft at the show;

(b) Examination of the general condition of the aircraft; and

(c) Examination of the packing records of emergency parachutes to determine the status of inspection and overall condition.

(2) Advance Notification. To avoid last minute delays, the ASI should have the air show coordinator remind the participants to have the appropriate aircraft and packing records ready for inspection before the show. Early contact with the organizers of air show events is encouraged so that informational activities and accident prevention strategies can be planned.

(3) Responsibility for Safety. While the show sponsor is responsible for crowd control, ASI's should keep in mind the safety of the spectators. Any safety-related deficiencies shall be brought to the attention of the show/race monitor immediately.

B. ASI Authority.

(1) Although the ASI's authority is not limited to the following, the ASI is authorized to:

(a) Change the effective time and date of the waiver after proper coordination with the appropriate air traffic facility;

(b) Add performers to the Schedule of Events if all terms of the certificate of waiver or authorization can be met; and

(c) Cancel or delay any acts if it is deemed necessary in the interest of safety.

(2) Because of fluctuating weather conditions, sometimes participants will be unable to perform their normal routines. ASI's should avoid canceling an act if it is possible to cancel parts in order to allow the demonstration to continue in a modified form.

(3) Aviation events normally operate on very tight schedules; therefore, ASI's should not interrupt events except to address safety-related issues requiring immediate attention.

(4) During air shows and air races, ASI's will have frequent contact with the general aviation community. ASI's are encouraged to present a positive image.

C. Aircraft Used in Parachute Operations.

(1) Aircraft engaged in sport parachuting operations must be operated in accordance with the rules prescribed in Title 14 of the Code of Federal Regulations (14 CFR) part 91. Additionally, large aircraft may be subject to the applicability of 14 CFR part 125.

(2) Aircraft involved in parachute jumping operations may have been modified to accommodate the jumpers. Such modifications require documentation of approval by the Federal Aviation Administration (FAA).

D. Special Situations. For a large or complex event, the regional office may supplement these procedures to cover unique situations. ASI's should contact the Flight Standards District Office (FSDO) of the appropriate region for further guidance.

7. MILITARY AIRCRAFT.

A. Section 91.203 defines the certification requirements for civil aircraft.

(1) In order for surplus military aircraft to operate, they must possess an appropriate and current airworthiness certificate.

(2) When an airworthiness certificate is appropriate and when the aircraft does not conform to a type certificate (TC) or aircraft listing (surplus military aircraft), the aircraft must have an experimental certificate issued for exhibition and/or air racing.

B. Section 91.319 prescribes the requirements for operating limitations. The original issuance of an experimental certificate is the responsibility of a Manufacturing Inspection District Office (MIDO), but may be delegated to the FSDO. Necessary guidance for the issuance of experimental certificates and the accompanying operating limitations is provided in FAA Order 8130.2, Airworthiness Certification of Aircraft and Related Products, current edition.

(1) The operating limitations assigned to the aircraft must include the serial number of the aircraft and must be kept together with the airworthiness certificate. These materials will contain the required maintenance and operational limitations.

(2) Limitations will state that the aircraft shall not be flown unless it is maintained and operated in accordance with appropriate military technical publications or manufacturers' instructions for the aircraft. In many cases, the specific publications will be included.

(3) The aircraft limitations may also contain a statement to the effect that no person shall operate the aircraft unless the aircraft has had a condition inspection performed within the preceding 12 calendar months in accordance with appendix D of 14 CFR part 43, and has been found to be in a condition for safe operation. Within the record of the inspection, a statement should be included certifying that the aircraft has been inspected on a specific date in accordance with the scope and detail of appendix D of part 43, and found to be in a condition for safe operation. The entry should include the aircraft total time-in-service, and the

name, signature, and certificate type and number of the person performing the inspection.

C. The ASI should verify that the airworthiness certificate is available and refer to the attached operating limitations for any specific information concerning area of flight, authorized maneuvers for which the aircraft has been tested and approved, type of maintenance necessary, and method of verifying that the aircraft is in a condition for safe operation.

D. Surplus military, and U.S. or foreign-manufactured turbine-powered airplanes, must be operated only by those persons authorized by Flight Standards personnel, via a letter of authorization (LOA). It is imperative that ASI's, when handling applications for such experimental exhibition certificates, ensure that the purpose is valid. ASI's should also advise the appropriate geographic FSDO via telephone of the application and furnish that FSDO with a copy of the certificate and operating limitations provided to the operator.

E. ASI's monitoring aviation events where a military jet aerobatics demonstration will be performed, must have satisfactorily completed on-the-job training in a military aviation event. This training should include participation in the feasibility determination, the preseason evaluation meeting, waiver preparation, and air show surveillance. District offices with no ASI who meets the above qualifications, should contact the regional air show coordinator to request training by a qualified ASI from another district office.

9. INTEROFFICE COORDINATION. District office managers should monitor air show activity within their geographical area regularly and communicate any significant issues to the regional air show coordinator. Issues requiring immediate attention (i.e., denial of application for waiver or authorization) should be reported immediately to the appropriate regional air show coordinator, who should forward any necessary information to AFS-802. In order to facilitate future handling of aviation event issues, the sharing of related information among district offices is encouraged.

SECTION 2. PROCEDURES

1. PREREQUISITES AND COORDINATION REQUIREMENTS.

A. Prerequisites:

- Knowledge of the regulatory requirements of 14 CFR parts 43, 65, and 91
- Completion of the Airworthiness Inspectors Indoc-trination Course or previous equivalent
- Completion of on-the-job training and participation in the issuance of a certificate or waiver
- Completed surveillance of three aviation events accompanied by a qualified ASI
- For events with military aircraft, completion of on-the-job training in a military aviation event

B. Coordination. This task requires coordination with Operations ASI's, and may require coordination with regional specialists.

3. REFERENCES, FORMS, AND JOB AIDS.

A. References (current editions):

- 14 CFR parts 1, 61, 103, 105, and 125
- FAA Order 8130.2, Airworthiness Certification of Aircraft and Related Products
- AC 91-45, Waivers: Aviation Events
- AC 103-7, The Ultra light Vehicle
- AC 105-2, Sport Parachute Jumping
- AC 125-1, Operations of Large Airplanes Subject to Federal Aviation Regulations Part 125

B. Forms:

- FAA Form 7711-1, Certificate of Waiver or Authorization

C. Job Aids. None.

5. PROCEDURES.

A. Review the Certificate of Waiver or Authorization. Review FAA Form 7711-1 to determine the type of aircraft involved in the activity.

B. Attend the Pre-Show Briefing. Discuss any requirements regarding scheduling, inspection of the air show/air race aircraft, and related activities.

C. Inspect the Participating Aircraft.

(1) Review the aircraft records to ensure the following:

- (a) The currency of the state of inspection; and

(b) Modifications made to aircraft to accommodate sport parachutists have documentation of field approval by the FAA, or a supplemental type certificate (STC).

(2) Inspect the aircraft for the following:

(a) The aircraft's general condition;

(b) Modifications made for the accommodation of sport parachute jumping;

(c) Current status of operating limitations for door removal, if applicable. (Consult AC 105-2 for a list of aircraft that have been flight-tested for operating limitations with the door removed); and

(d) Airworthiness certificates, registration certificates, and operating limitations, as appropriate.

D. Inspect Parachutists' Equipment. Inspect parachutists' equipment to ensure the following:

(1) The main parachute has been packed within the previous 120 days;

(2) The auxiliary parachute has been packed by a certificated and appropriately rated rigger;

(3) The equipment has been manufactured under a TC or Technical Standard Order (TSO), or is a personnel-carrying military parachute;

(4) The auxiliary parachute has been packed by a certificated person within the time requirements prescribed by § 105.43;

(5) The certificated parachute rigger's seal has been installed properly; and

(6) The parachute packs and harness are in good condition.

E. Brief Air Show/Air Race Inspector-in-Charge. Bring any safety-related deficiencies to the immediate attention of the ASI in charge of monitoring the air show/air race.

F. Perform Supplemental Procedures, As Required. Contact the FSDO of the appropriate region for further guidance, as appropriate.

7. TASK OUTCOMES.

A. File PTRS Data Sheet.

B. Document Task. Coordinate all supporting paperwork with the ASI in charge of monitoring the air show/air race.

9. FUTURE ACTIVITIES. None.